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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/869,389

Filing Date: June 28, 2001

Appellant(s): CHAPEL ET AL.

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Jack Schwartz  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 03/14/2007 appealing from the Office action mailed 09/07/2006.

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**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,067,282

Moriyama

05-2000

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

*Claim Rejections - 35 USC § 102*

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 16-18, and 21-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Moriyama (US Pat. No. 6,067,282).

Note to the Applicant: The US PTO considers the Applicant's "or" language to be anticipated by any reference containing one of the subsequent corresponding elements.

Regarding claims 16, 17, and 18, Moriyama discloses digital video reception device, comprising:

means of reception and of demultiplexing of a multiplexed digital steam (see fig. 18-19); and means of storage comprising two file systems having different recording block sizes (see fig. 19, audio and video files and col. 18 lines 9-17, video file size is larger than audio file size).

Regarding claim 21, Moriyama discloses the storage means comprise a recordable disk comprising a single boot block, a first area reserved for the service data of the first file system and for the corresponding data

blocks, and a second area reserved for the service data of the second file system and for the corresponding data blocks (see fig. 19 DVD 1 and col. 6 line 61-col. 7 line 19).

Regarding claim 22, Moriyama discloses a first video writing memory for accumulating a predetermined quantity of demultiplexed video packets; a second audio writing memory for accumulating demultiplexed audio packets; means of storage being adapted to store the remultiplexed audio and video packets in the form of blocks of the first file system, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining the predetermined quantity of video data (see fig. 19, and col. 7 lines 51-67 and col. 18 lines 9-17).

Regarding claim 23, Moriyama discloses a third video reading memory for reading video data from the storage means; and

a fourth audio reading memory for the reading of audio data, the respective sizes of the third and fourth memories, video and audio reading respectively, being equal to the sizes of the first and second memories, video and audio writing respectively (see fig. 19).

Regarding claim 24, Moriyama discloses a writing memory for transmitting data to the storage means, which memory is organized as an area comprising N video writing memories of FIFO type and an audio writing area comprising a memory of FIFO type having the size of N audio writing memories (see col. 23 lines 6-16 and col. 23 lines 41-61);

means for controlling the transfer of video data to a first of the N video writing memories and of audio data to the audio writing area, the transfer of video data being continued to a next video writing memory when said first of the N video writing memories is full (see col. 22 lines 19-31); and

means for storing the location, in the area for recording audio data, of the audio data corresponding to each of the N video writing memories (see col. 23 lines 41-60).

Regarding claim 25, see rejection of claim 24, operation of FIFO type memories.

Regarding claim 26, Moriyama discloses a reading memory for receiving data from storage means, which memory is organized as an area comprising N video reading memories of FIFO type and all audio reading area comprising a memory of FIFO type having the size of N audio reading memories (see col. 23 lines 6-16 and col. 23 lines 41-61);

means for controlling the transfer of video data to a first of the N video reading memories and of audio data to the audio reading area, the transfer of video data being continued to a next video reading memory when said first of the N video reading memories is full (see col. 22 lines 19-31); and means for storing the location, in the area for reading audio data, of the audio data corresponding to each of the N video reading memories (see col. 23 lines 41-60).

Regarding claim 27 see the rejection of claim 26 above, FIFO type memory.

Regarding claim 28, the limitation of claim 28 can be found in claims 16-18 and 22 above. Therefore claim 28 is analyzed and rejected for the same reason as discussed in claims 16-18 and 22.

Regarding claim 29, Moriyama discloses the ratio of the sizes of the first and second areas is such that it is greater than or equal to the maximum ratio of the bit rate of video (1a1 and of the bit rate of audio data in the digital stream (see col. 7 lines 51-67 and col. 18 lines 9-17).

Regarding claim 30, Moriyama discloses recording in each block of a (1a1 item indicating the quantity of audio data recorded in this block (see col. 7 lines 51-67).

Regarding claim 31, Moriyama discloses the recorded audio and video data pre elementary stream packets, with the exclusion of information emanating from the transport layer (see fig. 18 and col. 7 lines 51-67).

Claim 32 is rejected for the same reason as discussed in claim 16 above.

Regarding claim 33, Moriyama discloses a rerecordable disk divided into sectors, data blocks of the first file system having a size of at least 256 sectors, data blocks of the second file system having a size of a few sectors (see col. 8 lines 9-17).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama in view of the admitted prior art.

Regarding claims 19-20, Moriyama discloses the limitations above except adapting the first file system to sequential access of the recorded data and simple

indirect accessing, while the second file system to random accessing and multiple indirect accessing. The present application stated the conventional manner of UNIX type file system (see page 28 lines 24-35 of the present Application). The Application discloses the conventional UNIX type favors random access to the data through multiple indirect addressing. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to adopt sequential and random access of the recorded video and audio data in order to search the content of the memory in different order.

#### **(10) Response to Argument**

In response to Appellant argument, "Moriyama does not disclose or suggest a recording device with 'means of storage comprising two file systems having different recording block sizes' as recited in claim 16 of the invention."

In response the Examiner respectfully disagrees. The phrase "file systems" is broad and read on the element of the cited reference. The appellant in the specification discloses one file system organization as an example, which is UNIX. However none of the claims specifically recites at least one of the file systems is UNIX. Encoding bit rate of audio signal is not the same as encoding bit rate of video signal. It is normal and conventional that they have different number of bits. In fig. 19 Moriyama shows two separate decoders, audio decoder 88 and the video decoder 93. The encoded video data are decoded and outputted from the decoder 88 and the encoded audio data are

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decoded and outputted from the decoder 93. Therefore Moriyama in fact discloses two different file systems.

In response to Appellant argument that file size is not the same as block size, the Examiner respectfully disagrees.

IEEE dictionary defined the term 'block' as:

**block** (3) (A) (software) *A group of contiguous storage locations, computer program statements, records, words, characters, or bits that are treated as a unit.*

Similarly, IEEE dictionary defined the term 'file' as:

**File** (1) (software) *A set of related records treated as a unit.*

(4) *An object that can be written to, or read from, or both. A file has certain attributes, including access permissions and type. File types include regular file, character special file, block special file, FIFO special file, and directory.*

As indicated above the two terms have the same definition. Therefore, as the appellant agreed, Moriyama teaches video file size (block size) is larger than audio file size (block size), and the audio and the video to be stored have different recording block sizes (see also col. 18 lines 9-18). Moriyama further discloses in the video pack 42, a packet including video data is recorded, and in the audio pack 43, a packet including an audio pack is recorded (see col. 7 lines 51-67). According to MPEG standard, compression rate is different according to the size of the file (size of the block), and Moriyama discloses the sizes of the two data files are different. Therefore Moriyama in fact teaches 'means of storage comprising two file systems having different recording blocks' as cited in the Appellant claim 16.

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Appellant states with respect to claim 21 "Moriyama merely describes the physical format of a DVD and does not mention or suggest a first and second area reserved for the service data of the first and second system, respectively, and for the corresponding data blocks, as in the present invention."

In response the Examiner respectfully disagrees. As stated in the above, the phrase 'file system' can be interpreted as any type of system as the claim is not specific to what the system is. Moriyama teaches the audio decoder and the video decoder decodes the two data using two different decoding systems. The audio file decoding system is not the same as the video file decoding system. The DVD 1 in Moriyama is provided with a lead in area at its most circumferential portion and a lead out area at its most circumferential portion, between which video information and audio information are recorded (see col. 6 lines 61-67), and the audio data is encoded using different bit rates than the video data. Therefore Moriyama teaches the physical format of a DVD and a first and second area reserved for the service data of the first and second system.

Appellant states with respect to claims 22-27 "Moriyama neither discloses nor suggests means of storage being adapted to store the demultiplexed audio and video packets in the form of the first file system, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining the predetermined quantity of video data."

In response the Examiner respectfully disagrees. First, as the Examiner stated in the Office Action, the USPTO considers 'or' language to be anticipated by any reference containing one of the subsequent corresponding element. Second, Moriyama teaches the demultiplexed video data are accumulated in a video buffer 87 to which the video signal is inputted (see fig. 19 and col. 23 lines 6-16) and the demultiplexed audio data are accumulated in an audio buffer 92 to which the audio signal is inputted (see fig. 19 and col. 23 lines 41-61). Moriyama further teaches the buffer 87 outputs the demultiplexed video data to the video decoder 88 and the audio buffer outputs the demultiplexed audio data to the audio decoder 93. Moriyama further discloses data of the plural CDs may be recorded on a single DVD. See also col. 7 line 6-col. 8 line 64. Therefore Moriyama in fact teaches the limitation of claim 22. Moriyama further discloses the video buffer 87 and the audio buffer 92 consists of a FIFO (first in first out) memory (see col. 23 lines 6-9 and 41-44).

Appellant states with respect to claims 28-31 "Moriyama does not suggest the usage of blocks that contain two distinct areas. Moriyama also does not show or suggest the determination of the sizes of the two areas, as shown in the present invention."

In response the Examiner respectfully disagrees. Moriyama teaches the DVD 1 in Moriyama is provided with a lead in area at its most circumferential portion and a lead out area at its most circumferential portion, between which video information and audio information are recorded (see col. 6 lines 61-67). Moriyama further teaches data capacity of audio information is different from data capacity of video information (see

col. 18 lines 9-18). Furthermore Moriyama discloses the **demultiplexer** 86 outputs the sub picture, the audio and the video data and outputs them as a sub picture signal, an audio signal, and a video signal, respectively to the buffers 89, 92 and 87 (see col. 22 lines 55-63). Moriyama further teaches the VOB (video object block) and in each VOB audio and video information are recorded (see col. 7 lines 30-38). One VOB is constructed such that it is completed by a plurality of cells, and one cell is constructed of a plurality of VOBUs (video object block units). One VOBU is provided with a navigation pack, a video pack, an audio pack, and a sub picture pack. See col. 7 lines 39-67). Moriyama further teaches the size of the audio file is less than and the size of the video file.

Appellant states with respect to claim 32-33 "Moriyama does not disclose or suggest a recording device having a double file system."

In response the Examiner respectfully disagrees. As stated above, the USPTO considers 'or' language to be anticipated by any reference containing one of the subsequent corresponding element. Claim 32 recites 'audio/video'. Therefore the Examiner read claim 32 as 'a double file system is adapted to files of a video stream type and wherein a second file system is adapted to files of smaller size than the video streams.' Therefore Moriyama teaches the audio files are smaller in size than the video files, and the video and audio files are encoded and decoded using different encoders and decoders.

In response to applicant's arguments (with respect to claims 19-20) against the references individually, one cannot show nonobviousness by attacking references

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individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Furthermore Moriyama teaches two file system as stated in the above.

For the above reasons, it is believed that the rejections should be sustained.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Helen Shibru

July 6, 2007

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